South Carolina Department of Health and Environmental Control

2600 Bull Street
Columbia, S.C. 29201

Commissioner
Michael D. Jarrett

MEMORANDUM

TO: Richard Haynes
Site Engineering Section
Division of Site Engineering and Screening
Bureau of Solid and Hazardous Waste Management

FROM: Melvin Blackwell, Hydrologist MTB
Superfund and Solid Waste Section
Division of Hydrogeology
Bureau of Solid and Hazardous Waste Management

DATE: April 25, 1990

RE: Draft Remedial Investigation Report
Medley Farm Site
SCD 980 558 142
Cherokee County

The referenced report has been reviewed. The Phase I investigation does not appear to have adequately characterized the site's hydrogeology and the extent of groundwater contamination. A groundwater sampling schedule needs to be developed. Specific comments are provided below.

Site Hydrogeological Conditions

1) The seven wells at four locations do not provide sufficient information to address the Remedial Investigation (RI) objectives. Site specific conditions warrant that additional geological and hydrogeological characterization be conducted in a Phase II RI. These conditions include the complex geology (saprolite and fractured bedrock), the surface area (7+ acres), the multiple source areas, and the potential for radial flow. The concern has been raised in previous SCDHEC memorandums on the RI workplan, in meetings with the potential responsible party's contractor, and in the monitoring well approval dated June 9, 1989 that the numbers and locations of wells would not provide sufficient hydrogeologic information.

A more comprehensive characterization of the site's hydrogeological condition should be made in order to determine the nature and extent of groundwater contamination. The collection of data is important for an efficient remediation design and the evaluation of the selected remedy. The EPA Office of Emergency and Remedial Response titled "Evaluation of Ground-Water Extraction Remedies" dated September 1989 and Jonathan Z Canon (EPA-Acting Assistant Administrator) memorandum "Considerations in Ground Water Remediation at Superfund Sites" dated October 18, 1989 indicate that data collection is usually not sufficient to fully assess contaminant movement and to evaluate groundwater remediation at Superfund sites. The reports encourage the collection of adequate geological and hydrogeological data to design, assess, and evaluate remediation.

2) A groundwater sampling schedule needs to be developed. The groundwater quality data should be used to assess and evaluate remedial activities.

cc: Tommy Hyde